

## **SPECIFICATION FOR ISOKINETIC BRISTLE BUNDLE BRUSHES.**

### **BACKGROUND OF THE INVENTION**

#### **FIELD OF THE INVENTION**

This invention relates generally to brushes of all kinds, containing bundles of bristles fixed to a distal end of a handle used for applying coatings, and specifically the bristles used for transferring the coating material from the liquid contained in fluid bulk within a container, to deposit, disperse and smooth said liquid to an even thickness upon a surface.

Surface finishing with coatings of paint, varnish, shellac, lacquer, plastic formulations and the like including chemicals for cleaning surfaces, utilize brushes (a common embodiment of bristles arranged to present a distal end to the surface being coated).

#### **DISCRIPTION OF THE PRIOR ART**

Manual brushes for applying coating materials are widely available in a variety of size, shapes and types with a wide assortment of bristles made from synthetic and animal hairs. Animal hairs are prescribed for use on volatile coatings; synthetic hairs are used on water based coatings; a blend of various hairs is used for general purpose coating material. Animal hairs have split ends, each branch of dimensionally finer diameter than the stem. Synthetic hairs generally have thicker diameter hairs, some bundles are wedge shaped at the contacting end.

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Brushes with small amounts of coating are repeatedly stroked left-right, up-down, waved in assorted motions until the coating is spread and smoothed. The spreading is accomplished in the earlier strokes with human controlled forces (isokinetically) while the smoothing is accomplished in the later strokes with lighter human controlled forces (isokinetically) against the surface being coated.

Hand held brushes of the prior art are disclosed in patents.:

### **OBJECTS OF THE INVENTION**

A general object of the present invention is to provide a brush that will decrease the stroking necessary to achieve spreading and smooth application of the coating materials.

A specific object of the invention is to provide an improved brush having a bristle placement that minimizes the human judgement required for control of forces.

### **SUMMARY OF THE INVENTION**

An improved brush is provided for reduced human stroking by arranging the bristles. The brush bristles include two or more types of bristle with specific distal lengths relative to each other. The smaller diameter, split bristles protrude beyond the stiffer, synthetic bristles.

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## BRIEF DESCRIPTION OF THE DRAWING

Figure 1. Is a side elevation view of two bristles depicting the bristle distal ends during a right-to-left stroke when forced against a surface.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

In the description that follows, like parts are marked throughout the specification and drawings with the same resource numerals, respectively. The drawing of the parts has been exaggerated for purposes of clarity.

Referring now to the figure1, the instant bristle embodiment **3** is moved right-to-left **4** against a surface **5**, presenting stiff bristle **1** in contact with the surface **5** spreading coating **6** and presenting the longer split bristle **2** in a following location, smoothing the coating **7** .

*Amal m*